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CARBON PRICING FOR CLIMATE MITIGATION

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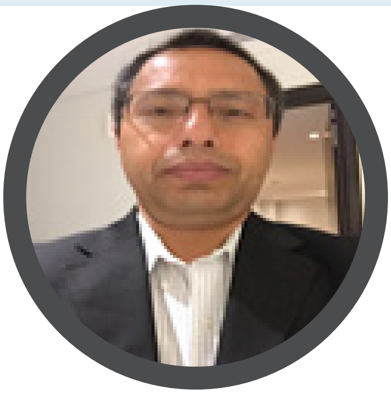

Carbon pricing is at the center of climate change policy debate. It follows a standard theory of environmental economics, often referred to poluter pay principle which suggest those who cause pollution should pay for its mitigation. A carbon pricing is a pricing mechanism that puts penalty on the sources of CO2 emissions. Although the concept was developed in theory by a British Economist Arthur Pigou (1877-1959) about a 100 years ago, its implementation to address climate change has started recently. Carbon pricing has different forms, such as carbon tax, cap and trade or emission trading system (ETS) and CO_2 offset mechanism. In practice, carbon tax has been introduced first time in Norway in 1990, followed by other European countries. Today, 67 jurisdictions (nations and sub-nations) have introduced either carbon tax or ETS or both in industrialized as well as developing world. A large number of developing countries actively participated in international greenhouse gas (GHG) offset programs, such as the clean development mechanism (CDM). In 2015, economies where carbon pricing instruments have been introduced, raised about US$26 billion in carbon pricing revenues. It is estimated that the international carbon market could mobilize upto US$220 billion annually by 2030 to meet the climate change mitigation pledges made by about a hundred of countries under the Paris Climate Agreement. While the wider deployment carbon pricing systems for global climate change mitigation has been going through a political resistance, a momentum, is however, being created in this favor, especially after the Paris Climate Agreemnt in 2015. In this background, this presentation will highlight the global implementation status of carbon pricing instruments; key barriers it has been facing; economic implications of various forms of carbon pricing mechanims and likely development of carbon pricing policies and markets in the future.

Biography

Govinda R Timilsina is a Senior Research Economist at the Development Research Group of the World Bank, Washington, DC. He has more than 23 years' experience across a board range of energy and climate change economics and policies at the international level. His key expertise includes carbon pricing, green energy, climate change policies, macroeconomic and sectoral modeling for policy analysis. Prior to joining the Bank, he was a Senior Research Director at the Canadian Energy Research Institute, Calgary, Canada. At present, he is leading a number of studies including carbon pricing, low carbon economy and sustainable urban transportation in various countries around the world.

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